APPENDIX A

June 2009

TABLE FOR CONVERTING VOLUME
TO WEIGHT OF VARIOUS MATERIALS,
TO BE USED FOR ESTIMATING
MUNICIPAL SOLID WASTE TONNAGES

(Use these numbers as a guide when weight data is not available for recycled materials.)

PLASTIC

HDPE (whole, uncrushed)

1 cubic yard = 30 lbs.

HDPE (flattened by hand)

1 cubic yard = 50 lbs.

PET (whole, uncrushed)

1 cubic yard = 40 lbs.

CORRUGATED CARDBOARD

Uncompacted, flattened

1 cubic yard = 200 lbs.

Compacted

1 cubic yard = 500 lbs.

NEWSPAPER

Loose (no strings or bags)

1 cubic yard = 400 lbs.

Neatly stacked (tied w/string)

1 cubic yard = 600 lbs.

One 12" stack of bundled newspaper = 35 lbs.

Compacted

Down stroke 750 lbs/cubic yard Horizontal 800 lbs/cubic yard

OFFICE PAPER

Uncompacted

White or colored ledger, flat 1 cubic yard = 400 lbs.

Computer paper

1 cubic yard = 600 lbs.

MIXED PAPER

Uncompacted

Varies widely with content Ranges 50 to 500 lbs. per cubic yard

GLASS

Loose (whole bottles)

1 cubic yard = 600 lbs.

175 lbs. in one, 55 gallon drum

Semi-crushed (manually broken)

1 cubic yard = 1000 lbs.

55 gallon drum = 300 lbs.

Crushed, maximum size, 1 1/2" (mechanically

broken)

1 cubic yard = 1,800 lbs.

550 lbs. in one, 55 gallon drum

ALUMINUM CANS

Whole:

1 cubic yard = 70 lbs.

One full grocery bag = 1.5 lbs.

One large plastic garbage bag = 21 lbs

Uncompacted 1 case (24 cans) = 0.8 lbs.

Compacted (manually), Flattened:

1 cubic yard = 250 lbs.

FERROUS CANS (tin coated steel cans):

Whole

1 cubic yard = 150 lbs.

Flattened

1 cubic yard = 850 lbs.

Whole

1 case (6 cans) = 2.2 lbs

MAJOR APPLIANCES:

Air conditioner (room)

1 unit = 64 lbs.

Dishwashers

1 unit = 92 lbs.

Clothes Dryer

1 unit = 130 lbs.

Clothes Washer

1 unit = 177 lbs.

MAJOR APPLIANCES (cont.):

Ranges

1 unit = 181 lbs.

Refrigerator

1 unit = 267 lbs.

Water Heater

1 unit = 131 lbs.

ORGANIC MATERIALS

Leaves (uncomposted & uncompacted)

1 cubic yards = 150 lbs.

13 cubic yards = 1 ton

Leaves (uncomposted & compacted)

1 cubic yard = 450 lbs.

4.4 cubic yards = 1 ton

Leaves (uncomposted & vacuumed)

1 cubic yard = 350 lbs.

5.7 cubic yards = 1 ton

Leaves (composted)

1 cubic yard = 550 lbs.

Composting reduces leaf volume 80%

Wood Chips

1 cubic yard = 500 lbs

4 cubic yards = 1 ton

Grass Clippings

1 cubic yard = 400 lbs.

5 cubic yards = 1 ton

Brush = 200 lbs cubic yard

OTHER MATERIALS

Passenger car tires

1 tire = about 20 lbs.

110 tires = 1 ton

Truck tires

1 tire = 120 lbs.

17 tires = 1 ton

Car Battery

40 lbs. per unit

Food Waste (mixed)

1 cubic yard = 500 lbs.

Demolition Debris

1 cubic yard = 1250 lbs.

1.6 cubic yards = 1 ton

Trees & Brush

1 cubic yard = 300 lbs.

6.6 cubic yards = 1 ton

Foam rubber Mattress

1 mattress = 55 lbs.

Mixed Bulky Waste

1 cubic yard = 400 lbs.

5 cubic yards = 1 ton

Wood Pallets

1 pallet = 40 lbs. avg.

Wood Waste

1 cubic yard = 350 lbs.

5.7 cubic yards = 1 ton

Oil

1 gal. = 7 lbs

Monitors and TVs

50 lbs. per unit

Computers and peripherals

20 lbs. per unit

Mercury Lamps - Fluorescent

.1875 lbs. per linear foot

CFLs

.125 lbs. per unit

Mercury Thermostats

.4166 lbs. per unit

Other Mercury Devices

.25 lb. per unit

Batteries

1 lb. per unit

Intact PCB ballasts

3.5 lbs. per unit

Sodium Bulb

.58 lb. per unit

U Lamp = 2

Circle Lamp = 2

Gallon of Ash = 3 lbs

Propane Tank = 15 lbs

Box Batteries = 44 lbs

Christmas Tree = 15 lbs

Bricks/Demo Debris 1,250 lbs cy

Gaylord = 1 cy

H:/WM_data/2008 Forms/Appendix A